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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,201	11/13/2001	David S. Taubman	10970780 -4	7143

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EXAMINER	
HO, TUAN V	
ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/054,201	<b>Applicant(s)</b> David Taubman	
	<b>Examiner</b> Tuan V. Ho	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Mutze (US 5,889,554).

With regard to claim 1, Mutze discloses in Fig. 1 a video camera recording an image, which comprises the apparatus for recording an image, said apparatus comprising the two dimensional array of sensors (CCD image sensor 2 includes image cells arranged in rows and columns, col. 4, line 37), three distinct spectral regions (filter elements include R, G and B color filters, col. 5, lines 35+), each block of sensors

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having equal number of sensors corresponding to each of the distinct spectral regions (pattern GM includes nine color pixels, where each block includes the same number of R, G and B filters such as three R, two B and one G as shown in table 3 and Fig. 2 and col. 6, line 18), and sensors in the one block are arranged such that any linear path within the array passing through a first sensor, passes through sensors corresponding to each of the at least three distinct spectral region (a linear path with the array passes a filter, and then passes filters B, R and G in the pattern GM provides different color lights).

With regard to claim 2, Mutze discloses in Fig. 1 a video camera recording an image, which comprises the e linear path passes though the sensors corresponding to the at least three distinct spectral regions within a disk, centered at the first sensor and having a radius not larger than five times the center to center spacing of the block of sensors (color filters R, G, G', G'')

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and B are arranged in a block 3X3; where the center of each block is not larger than four pixel sensors, e.g. the distance from center filter R of block 1 and block 2 is 4 pixels as shown in Fig. 2).

With regard to claim 3, Mutze discloses in Fig. 1 a video camera recording an image, which comprises each of the sensors corresponding to one of the spectral regions in blocks not adjacent to an edge of the two-dimensional array is adjacent to a sensor corresponding to the same spectral region (the center block GM is adjacent to another block with the same color filter pattern as shown in Fig. 2).

With regard to claim 4, Mutze discloses in Fig. 1 a video camera recording an image, which comprises the number of different spectral regions is 3, the spectral regions being denoted by R(red), G(green), B(blue), and the sensors are arranged in a cyclic pattern of the rows or columns (filters R, G and B is arranged in a cyclic pattern as shown in GM blocks).

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mutze et al in view of Niwamoto (US 6,134,347).

Mutze et al discloses the same subject matter as discussed with respect to claim 1, except for the spectral regions being denoted by C, M and Y.

Mutze et al does not disclose any spectral regions denoted by C, M, and Y. However, Niwamoto teaches the use of a spectral region being denoted by M, C, and Y so as to process the image with high efficiency and color accuracy.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made in substitute the R, G B color filters of Mutze et al with the C, M, and Y color filters because the substitution would make the color signals more accurate and natural.

4. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN HO whose telephone number is (571) 272-7365. The examiner can normally be reached on Mon-Fri from 7AM to 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, JIM GROODY can be reached on (571) 272-7950. The fax phone

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number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is (571) 272-2600.



TUAN HO

Primary Examiner

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